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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,923	10/30/2001	Keicy K. Chung	70049-00002	7533

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EXAMINER
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REFAI, RAMSEY

ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/017,923	Applicant(s) CHUNG, KEICY K.	
	Examiner Ramsey Refai	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/31/06, 12/18, 06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

*Response to Amendment*

Responsive to Request for Continued Examination (RCE) received February 5, 2007. Claims 1, 4, 7, 10, 11, and 14 have been amended. Claims 1-16 remain presented for further examination. Applicant appears to have inadvertently left out claim 16 from the claim set filed February 5, 2007. For examination purposes, claim 16 will be assumed to remain as presented in the claims set filed February 16, 2006 since no statement regarding any amendments to claim 16 were made in the remarks section. Additionally, Applicant is requested to correct the claim status identifier for *withdrawn claim 10*.

*Response to Arguments*

1. Applicant's arguments have been fully considered but they are not persuasive.

The amendments to the paragraphs [0025] and [0028] of the specification have not been entered.

- In the remarks, the Applicant argues in substance:

Argument A: *Jacob et al do not teach or suggest limitations relating to a direct attached storage peripheral or wherein the processor appears to the computer as a direct attached storage peripheral.*

In response, the Examiner respectfully disagrees. Jacobs et al teach that the user can communicate without the need to communicate with any other device in order to connect to the cache server. (*direct attached storage peripheral*). Jacobs et al also teach that the cache server can be designated to handle only specific types of requests by examining the header of the request, to determine a security profile, the user sending the request, etc. (See fig 4, column 13, lines 25-55) and the medium which data requests are received may include direct or indirect

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communication using wired or wireless communication. (See column 6, lines 5-11). The cache server meets the scope of the claimed direct attached storage peripheral.

*Specification*

2. The amendment filed February 5, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: " Further, those skilled in the art will appreciate that such formats allow the CBD 202 to be used as a direct attached storage peripheral." in paragraph [0025] of the disclosure and " " as a direct attached storage peripheral" in paragraph [0028] of the disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1, 4, 7, 10, 11, and 14 have been amended to include the limitation: " a direct attached storage peripheral" . However, this limitation is not supported in the original disclosure. The amendments to the specification, in an attempt to provide support for this new limitation, has not been entered and is the subject of the above objection to the disclosure under 35 U.S.C. 132(a) . Since the amendments to the specification have not been

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entered, the claims are therefore unsupported by the disclosure and are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 7 and 9 are rejected under 35 U.S.C. 102(e) as being unpatentable by Jacobs et al (U.S. Patent No. 6,732,237).

7. As per claim 7, A method of providing a file to a computer comprising:

receiving in a storage device a request from the computer for the file, wherein the storage device is in communication with the computer as a direct attached storage peripheral and includes a storage means and a computer interface, the computer interface being adapted to enable communications exclusively between the computer and the storage device; (Figure 1, Figure 3, 300)

determining whether the file is cached on the storage means (Fig 3, column 16, lines 42–53);

determining, if the file is not cached on the storage means, whether the file is available from a remote file server, and if the file is available from the remote file server, retrieving the file from the remote file server (fig 3, column 16, column 16, lines 50–57 and

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caching the retrieved file on the storage means; and providing to the computer the file on a read-only basis if the file is cached on the storage means (Figure 3, column 16, lines 64-65, column 11, lines 1-2).

8. As per claim 9, Jacobs et al teach deleting the cached file from the storage means upon receiving a command from the file server to delete the cached file (column 6, lines 39-47).

*Claim Rejections - 35 USC § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-6, 8, 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al (U.S. Patent No. 6,732,237) in view of " Official Notice" .

11. As per claim 1, Jacobs et al teach a storage device comprising:

a processor; a computer interface communicably connected to the processor, wherein the computer interface is adapted to enable the processor to communicate with a computer as a direct attached storage peripheral; a network interface communicably connected to the processor to enable the processor to communicate with a remote file server, wherein the processor is adapted to employ the network interface for communications exclusively with the remote file server (Figure 1, column 4, lines 15-37); and

a storage means communicably connected to the processor, the processor being adapted to have read and write access to the storage means, wherein upon receipt of a file request from the computer (Figure 3, 300) the processor is adapted to sequentially (1) determine whether the file is cached on the storage means and provide the file to the computer on a read-only basis if

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the file is cached on the storage means (Figure 3, 302; column 9, lines 3-21), (2) request the file from the file server if the file is not cached on the storage means, and if the file is obtainable from the file server, cache the obtained file on the storage means and provide the obtained file to the computer on a read-only basis (Figure 3).

Jacobs et al fail to explicitly teach that the processor returns a file unavailable notice to the computer if the file is not cached on the storage means and not obtainable from the file server. However, However, " Official Notice" is taken that both the concept and advantage of using a file unavailable notice such as a " 404-File Not Found " error message is well known and expected in the art. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to include a file unavailable notice in Jacobs et al' s system because doing so would inform a user that the data that the user has requested is unavailable.

12. As per claims 2, Jacobs et al teach wherein the computer is communicably connected to a network server through the network interface (Figure 1, column 4, lines 15-37).

13. As per claim 3, Jacobs et al teach wherein the storage means comprises random access media (Figure 1, column 4, lines 15-37).

14. As per claim 4. A computer network comprising:

a file server; a network server; a computer communicably connected to the network server, the computer being remotely disposed from the file server and the network server (Figure 1);

a storage device (cache server) communicably connected to the computer and the file server, the storage device in communication with the computer as a direct attached storage peripheral and comprising a processor, a computer interface, a network interface, and a storage means wherein the computer interface is adapted to enable communications exclusively between the computer and the storage device; the processor is adapted to employ the network interface

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for communications exclusively with the remote file server ; the processor is adapted to have read and write access to the storage means (Figure 1, column 4, lines 15-37); and

upon receipt of a file request from the computer (Figure 3, 300) the processor is adapted to sequentially (1) determine whether the file is cached on the storage means and provide the file to the computer on a read-only basis if the file is cached on the storage means (Figure 3, 302; column 9, lines 3-21), (2) request the file from the file server if the file is not cached on the storage means, and if the file is obtainable from the file server, cache the obtained file on the storage means and provide the obtained file to the computer on a read-only basis (Figure 3).

Jacobs et al fail to explicitly teach that the processor returns a file unavailable notice to the computer if the file is not cached on the storage means and not obtainable from the file server. However, However, “ Official Notice” is taken that both the concept and advantage of using a file unavailable notice such as a “ 404-File Not Found “ error message is well known and expected in the art. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to include a file unavailable notice in Jacobs et al’ s system because doing so would inform a user that the data that the user has requested is unavailable.

15. As per claim 5, Jacobs et al teach wherein the computer is communicably connected to the network server through the storage device (Figure 1, column 4, lines 15-37).

16. As per claim 6, Jacobs et al teach wherein the storage means comprises random access media (Figure 1, column 4, lines 15-37).

17. As per claim 8, Jacobs et al fail to teach providing to the computer a response indicating that the file is not available if the file is not cached on the storage means. However, However, “ Official Notice” is taken that both the concept and advantage of using a file unavailable notice such as a “ 404-File Not Found “ error message is well known and expected in the art. It



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would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to include a file unavailable notice in Jacobs et al' s system because doing so would inform a user that the data that the user has requested is unavailable.

18. As per claims 11 and 14, Jacobs et al contains the similar limitations as claim 1, but now teaches that the file is a bootstrap file or an operating system file. Although Jacobs et al does not explicitly teach that the particular file type is a bootstrap file or an operating system, Jacobs et al do teach that the requested data maybe include textual, numerical, multi-media, or other types and forms of information suitable for transmission to a user through a network and may adhere to any of a variety of protocols or formats (e.g. HTTP, FTP, HTML, XML) (column 5, line 66-column 6, line 5). It would have been obvious to one of the ordinary skill in the art at the time of the applicant' s invention to recognize that it was merely a matter of choice of implementation, which clearly does not require any inventive step. Since the determination process is accomplished by assigning file names, extensions or the like, as a determination parameter, changing the file type is obvious and is not patentably distinct over Jacobs et al.

19. As per claim 12, Jacobs et al teach wherein the computer is communicably connected to a network server through the network interface (Figure 1, column 4, lines 15-37).

20. As per claim 13, Jacobs et al teach wherein the storage means comprises random access media (Figure 1, column 4, lines 15-37).

21. As per claim 15, Jacobs et al teach wherein the computer is communicably connected to the network server through the storage device (Figure 1, column 4, lines 15-37).

22. As per claim 16, Jacobs et al teach deleting the cached file from the storage means upon receiving notice from the file server that an updated version of the cached file is available (column 6, lines 39-47).

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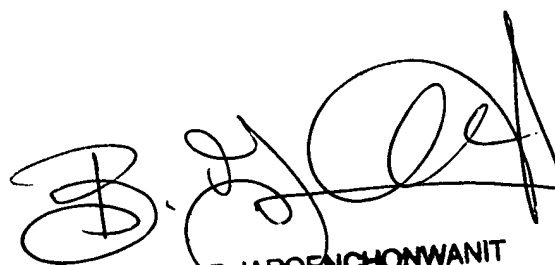
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramsey Refai  
Examiner  
Art Unit 2152  
February 11, 2007



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER